

Date: Monday, 5/15/2006 10:48:59 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206 L HIGH GEAR SKIDTUBE
Job Number	: 27095A		
Estimate Number	: 10522		
P.O. Number	: N/A	Part Number	: D206642441
This Issue	: 5/15/2006	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Number	: D2650 REV E
First Issue	: N/A	Project Number	: N/A
Previous Run	: 27094A	Drawing Revision	: E
	Type : LANDING GEAR	Material	: N/A
Written By	: <u>SEE COMMENT BELOW</u>	Due Date	: 6/2/2006
Checked & Approved By	: <u>06.05.15</u>	Qty:	1 Um: Each
Comment	: Est Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM		

## Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-441 CHG002

KS 06-05-18

2.0

D2620

Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2620

Bent Tube 3" OD

B 27205 BE 06-06-05

3.0

D2647

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2647

Fwd Cap

B 20535 BE 06-06-13

4.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube BE 06-06-05

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650 BE 06-06-05

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod

B 20535 BE 06-06-13

M18839/M100660

4-Grind weld flush to cap on top surface only. BE 06-06-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27095A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*DP 06-6-21*

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 23.0000 Each(s)/Unit Total: 23.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

23 D2649

Crossbolt spacer

*325864 BE 06-06-21*

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod

*M18839 BE 06-06-21*

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

*BE 06-06-26*

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

*BE 06-06-26*

11.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2680-041

Nut Plate

*B24203 BE 06-06-27*

12.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 CCR264SS3-3

Rivets

*M14651 BE 06-06-27*

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Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 M7885/3-4-3

Rivets

*m19099 BE 06-06-27*

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

*BE 06-06-27*

15.0

QC5/9

WELD INSPECTION



*QC9 -> PD 06-06-27 (1)*

*06-06-27 (1)*

Comment: WELD INSPECTION

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White (Ref. 4.3.5.1) as per QSI 005 4.3

Make sure Nut Plate Thread protected use paint screw

*A-M 06-07-05*

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*DL 06/07/06 (1)*

18.0

D26483

Wearpad



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 D2648-3

Wearpad

*B25904*

19.0

D265615

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-15

Wearshoe

*B24845*

*DL 06/07/06 (1)*

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Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

D265623

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-23

Wearshoe B22085

21.0

D265637

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-37

Wearshoe B26366

22.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3429-1

Wearpad B24417

23.0

ALS41032130

Insert



Comment: Qty.: 60.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick:

Qty Part Number

Description Batch

60 ALS4-1032-130

Inserts M18293

or (see QSI 017)

24.0

AN960JD10L

Washer



Comment: Qty.: 60.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick:

Qty Part Number

Description Batch

60 AN960JD10L

Washer M18235

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Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

MS27039108

Screw



Comment: Qty.: 60.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick:

Qty Part Number

Description Batch

60 MS27039-1-08

Screw M18836

26.0

D26511

Plug



Comment: Qty.: 22.0000 Each(s)/Unit Total : 22.0000 Each(s)

Pick:

Qty Part Number

Description Batch

22 D2651-1

Plugs B25365

27.0

D26513

O-Ring



Comment: Qty.: 22.0000 Each(s)/Unit Total : 22.0000 Each(s)

Pick:

Qty Part Number

Description Batch

22 D2651-3

O-Rings B23491

28.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960JD416

Washer M11151

29.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 MS27039-4-06

Screw M16874

DL 04/07/06 ①

W/O:		WORK ORDER CHANGES					
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Job Number: 27095A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

30.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap B25381

31.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN960JD10L

Washer M18235

32.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-08

Screw M18836

DL 06/07/06 ①

33.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291

M101193

Sikaflex expiry date:

11/09

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291

M101193

Sikaflex expiry date:

11/06

6-Wing Walk as per Dwg D2650-7 and QSI 005 4.4

Batch: M101266

FL 06 07 10 ①

W/O:		WORK ORDER CHANGES					
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			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: 27 Date: 08/01/12

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27095A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

*Jan 11 11*

35.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *N/A*

*6/2/11*

36.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

*D06/07/12 1*

Job Completion



*u D6-87 u*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

**DART**RELEASED  
16 04 17 #

DESIGN 147	DRAWN BY 147	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED PH	APPROVED H	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES	SCALE NTS
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 27095A**NOTES**

- 1) WELD PER DART QSI 004
- 2) DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 3) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 4) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 5) FINISH:  
-CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3  
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 6) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 7) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

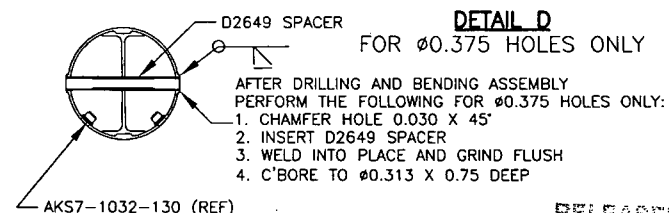
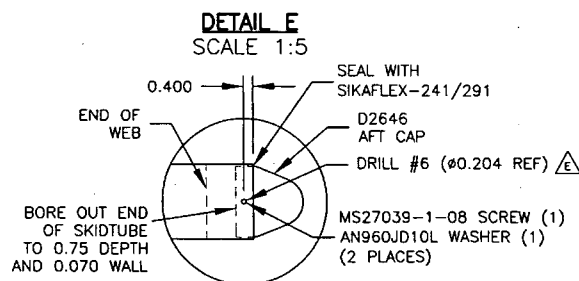
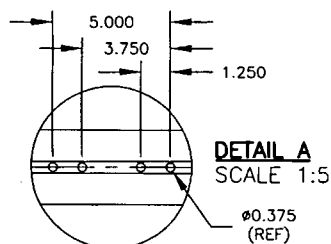
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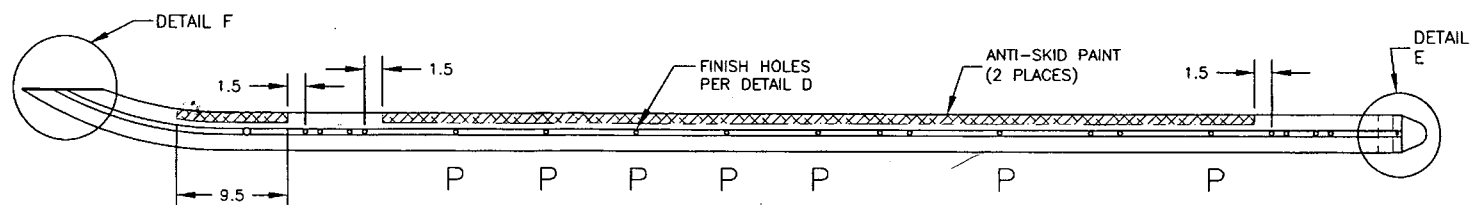
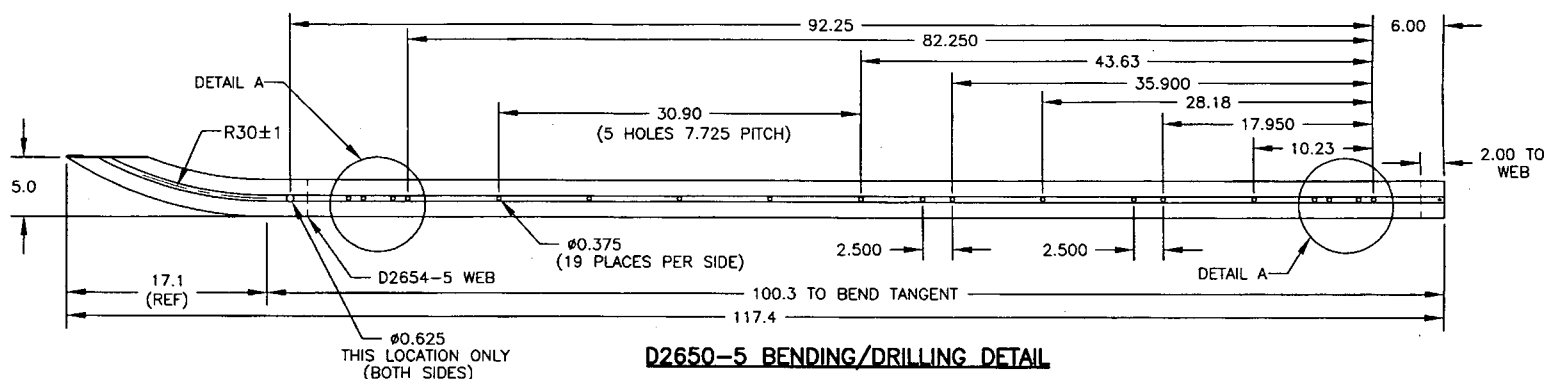




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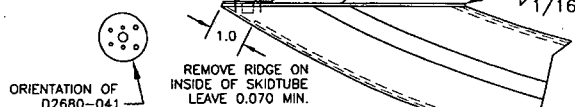
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**DETAIL F (NOT TO SCALE)**

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH



- CCR264SS3-3 RIVET (2 PLACES)
- MS27039-4-06 SCREW (1)
- AN960JD416 WASHER (1)
- CR3212-4-03 RIVET (2 PLACES)
- D2680-041 NUTPLATE (1)
- D2647 CAP (1)

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CHECKED	PH	APPROVED	PH	DRAWING NO.	REV. E
DATE	06.03.30	TITLE	SKIDTUBE	D2650	SHEET 4 OF 5
					SCALE 1:10

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TITLE	SCALE
SKIDTUBE	1:10